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## WHAT THE MEDICAL PROFESSION CAN DO TO DIMINISH THE MORTALITY FROM CANCER\*

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THE selection of so discouraging a disease as cancer as a subject on which to speak before your society indicates a state of mind on the part of the speaker which appears to reflect little of the pleasure and appreciation I feel at receiving the honor of your invitation to attend this meeting of the California Medical Association. It is in the hope, however, that I may succeed in dispelling some of the pessimism which everywhere attends this subject that I venture to offer to you these reflections upon cancer in general, and in particular upon the responsibilities of the medical profession in regard to this disease.

### INCREASE IN THE DEATH RATE OF CANCER

No medical audience needs any argument to persuade them that the situation in which we find ourselves today, in relation to the diagnosis and treatment of cancer in its many situations, and to its steadily increasing death rate all over the world, is a critical one. Where we see the death rate of tuberculosis diminishing year by year and that of cancer increasing in almost equal measure, we must appreciate the inefficiency of our present methods of attack upon the cancer problem. In the United States registration area cancer deaths increase almost uniformly two per cent a year, and have advanced from 63 to 96 per 100,000, and from sixth to second in the mortality list since 1900.

No explanation of this fact, by reference to more accurate diagnosis or to the attainment of a greater proportion of the population to the cancer age, diminishes in any way the significance of the fact that year by year more and more of our population die of cancer. That is the fact which we must face, and it behooves us as members of that profession which has accepted the responsibility of safeguarding and protecting the health of the community, to consider seriously what we

are going to do about it! Shall we sit by with idle hands and await the problematic discovery of some universal remedial agent for cancer by one of the many institutions devoted to cancer research, or shall we admit that cancer differs so markedly from those other diseases for which already successful methods of cure have been discovered that it is well within the range of possibility that there is not one cause but perhaps a multitude of causes for cancer. Should this be so a "cure" for cancer in the form of a single remedial agent or method is scarcely to be expected. Under these conditions our attack upon the disease must be made by the mobilization of a whole army of different agencies, many of which we now possess, but all of which may be made much more effective than they are as we employ them today.

The metaphor of "mobilization of an army" in the fight against cancer is not perhaps too remote to be justified in this connection if we stop to consider the resources which we are in a position to bring to bear in this fight today.

### RESOURCES IN THE FIGHT AGAINST CANCER

First and foremost of these resources we must place the knowledge we have so laboriously gained about cancer. While the germs of this knowledge date back to the earliest medical writings of history, accurate knowledge of the disease made its beginnings with cellular pathology, under Virchow, in the latter half of the nineteenth century. It is only in the past twenty-five years, however, that many of the popular misconceptions in regard to cancer have been dispelled, such as the theory that it is a humoral or blood disease, that it is due to parasitic organisms, or that it is of necessity a fatal disease. It is safe to say that the last twenty-five years have added to our knowledge more facts than had been accumulated in all the centuries before, and today this knowledge is increasing by leaps and bounds. Many of the best minds in the many different fields of science which touch upon this subject are engaged today in productive and promising laboratory and clinical investigations in cancer, and it will soon be possible to say, if indeed it cannot already be said, that we know more facts about cancer in man and in animals than we do about a great many other diseases for which we have remedial agents which are effective for the control of the disease.

\* This guest speaker paper read before the general meeting of the California Medical Association, at the sixty-first annual session, Pasadena, May 2-5, 1932.

## THE "CAUSE" OF CANCER

It is, of course, true that we are unable to say that we know the "cause" of cancer. In the diseases of parasitic or metabolic or physiologic origin, the discovery of the cause of the disease has been an essential condition to our understanding of its nature and to the development of our methods for its control. With cancer, however, it is a different story. Cancer is a disease which may occur in any one of a multitude of different portions of the human or animal body, and we have good reason to believe that it may be brought into existence by any one of a number of different agents.

To illustrate this aspect of the situation let me state the conception of the disease cancer which has gradually come into being in my own mind, and doubtless into the minds of many others who have been interested in this subject. I make this a personal matter, however, solely to avoid committing anyone else to a statement which may well require revision in the days to come, when we have acquired further knowledge than we now possess. My own concept, then, is as follows: Cancer is a disease in man and animals in which the essential characteristic is a change of manner of growth of a group of cells in the body, of such a nature that they show an increased rapidity of cell division, combined with a loss of differentiation for such function as those same cells normally exhibit in the body economy. Combined with these changes is an alteration of the normal tissue relations which maintain the anatomical integrity of the different cellular components of the body, with the result that the cells which compose the malignant tumor invade the other tissues in their immediate vicinity, and may be carried through the lymphatics or the blood vessels or otherwise to more distant regions, where they develop as new colonies of cancer cells or metastases.

While it is true that certain highly malignant tumors do appear to develop in the embryonal "rests" to which Cohnheim attributed the development of cancer, the importance of this phenomenon has been entirely overshadowed in more recent times by the conception of the part that so-called "chronic irritation" plays in the causation of cancer. It is an extraordinary fact, and one that is even yet not so widely appreciated as it should be, that cancer can be produced accidentally in man and intentionally in laboratory animals by three such different methods as by the exposure of the tissues to the long-continued irritative effects of chemical agents (tar), physical agents (x-ray) and biologic products (bilharzia, cat-tape-worm). The one common factor in these three different forms of carcinogenic agent is that of prolonged non-lethal damage and of stimulation of the reparative processes of nature. In man the chronic irritative lesions of the skin which we see in tar, pitch, and paraffin workers, or on the scrotum of the now almost obsolete chimney sweep, are characterized by keratoses and thickenings of the skin and by the formation of benign

warty growths, which may last for perhaps ten to fifteen years before cancer actually develops. In animals the experiment is accomplished more rapidly—say in weeks or months, but in a time interval which corresponds closely, so far as the life span of the animal is concerned, to the ten to fifteen years in human beings.

With x-ray the story is the same, and it was the long duration of the chronic irritative and inflammatory stages of the process before cancer began that delayed so long our recognition of the dangers of continued exposure to x-rays, and brought about the sacrifice of so many valued lives among the pioneer investigators in this most valuable but hazardous field of physical and medical science.

The classical examples of the significance of biologic agents in the production of cancer are cancer of the bladder in man, as a result of infestation with bilharzia; and in animals the production of sarcoma of the liver in rats, by Wood, by their infestation with the cat-tape-worm. These two examples serve, however, to complete the picture and show the diversity of agents which may be employed to produce cancer. The significance of these facts in regard to the production of cancer by agents capable of causing chronic irritation, lies not alone in the conception which it gives us as to the cancer process as a whole. It provides also a firm and reasonable foundation for efforts looking to the prevention of cancer, a most important aspect of the entire subject which may well, in the future, be counted of almost as much significance as is the treatment of the disease itself. If by treatment we can eliminate the irritation which causes cancer, or even if only we can recognize the symptoms of such an irritant and by continued observation learn to intervene in time, with appropriate methods of treatment we can prevent cancer just as definitely as we prevent typhoid fever or smallpox by vaccination.

The importance of heredity in cancer is still under active discussion. So far as animals are concerned we must admit that inheritance can play a very significant part in the etiology of cancer. The work of Tyzzer, Maud Slye, and Clarence Little demonstrates this fact, although the question of the number of genes involved and whether cancer is a dominant or a recessive character is still a field for active controversy. Human beings, however, are neither mice nor guinea pigs, and in-breeding of such a degree as is necessary for the demonstration of cancer inheritance in mice is revolting and indeed impossible in humans. Under these circumstances we may perhaps safely say that up to the present time, with the exception of certain very rare but well recognized and peculiar tumor processes in human beings, cancer is not a matter of direct inheritance. I am ready myself, however, to believe that an inherited lack of resistance to cancer may indeed exist in human beings, or if you prefer, we may call it a predisposition to cancer.

It may well be that the tissues of one individual, either through inheritance or from some other as yet unrecognized constitutional state, are more readily awakened to the peculiar form of unlimited growth which we call cancer than are those of other persons. Evidence of something of this sort is afforded by two facts: first, that all human beings and all animals exposed to chronic irritation, such as that of tar or x-ray, do not develop cancer at the same time; some are more susceptible than others. The second observation has to do with the occurrence of multiple cancer in the same individual. We have all seen patients cured of one form of cancer, only to develop primary cancer of another organ, and instances of threefold or even fourfold occurrence of cancer are recorded. Under these circumstances it seems only reasonable to concede that in human beings inheritance may well carry a reduced resistance to cancer. The individual so afflicted, however, should be able to protect himself and overcome this possible handicap by learning the symptoms which are in any way suggestive of cancer, and by seeking competent advice immediately if any such symptoms do arise.

Today it is a generally accepted fact that cancer begins at some single point of origin and extends from that spot by infiltration of the adjacent tissues or through the lymphatics and the blood vessels and occasionally by implantation from one to another surface of the body cavities. We know that certain tumors have sites of predilection for their metastases, such as the extension of hypernephroma or cancer of the breast, thyroid, and prostate to the bony skeleton or that of melanotic sarcoma of the eye to the liver, or of osteogenic sarcoma to the lung. We know that as a rule it is only the development of metastases in some internal organ which finally impedes a vital function that cancer causes death, and it is on this account that it is so difficult to foretell the life duration of even an advanced case of cancer.

#### RÔLE OF THE PATHOLOGIST IN THE STUDY OF CANCER

The study of cancer by the pathologist in the laboratory and in the autopsy room has been, of course, the essential foundation of our knowledge of this disease. It is by the facts there gained that the different forms of cancer are identified and classified, and by this means that our knowledge of its course has been established. For many years it has been customary to recognize in the laboratory tumors which by their microscopic characteristics show evidence of extreme rapidity of growth. v. Hanseemann's term "anaplasia" was indicative of these characters, and denoted an increased rapidity of growth, with a corresponding loss of differentiation for function, so that in the tumors of extreme malignancy all means of identification of the tissue of origin may be lost, and carcinoma be mistaken for sarcoma, or vice versa. The application of these facts to the clinical study of tumors, however, owes its origin to A. C. Broders of the Mayo Clinic, who was the

first to attempt the histological grading of a series of cases of cancer of the lip, and check these findings with the known clinical results of treatment. Since that time—now only eleven years ago—the histological grading of the malignancy of tumors has been widely accepted, and today a pathological report which states merely that the tissue examined is cancer is, in many clinics, considered quite incomplete unless an attempt is also made to evaluate the degree of malignancy the tumor shows.

There should be no misapprehension, however, about this matter—a tumor of low-grade malignancy is perfectly capable of causing the death of the patient, otherwise it would not be cancer—and a tumor of high histological malignancy may well be cured, if only it is discovered and removed or destroyed before it has extended to the surrounding parts. In the long run, however, more tumors of low malignancy are cured and less of the higher grades. In fact, perhaps the best example of the significance of grading is obtained when we consider the results of treatment in comparison with the temporal duration of the disease. Both in cases of cancer of the breast and of cancer of the mouth a study of end-results not infrequently shows the apparent paradox of a larger percentage of cures in those cases which show the longest duration in months. It is only by recognizing the significance of the varying degrees of malignancy that we can understand that a low-grade tumor of, say twelve months' duration, may well be less widely extended and thus more readily cured than will be a highly malignant one of shorter duration but more rapid growth.

Another characteristic of tumors which is determined partly by histological study, but far more by clinical experience, is that of radiosensitivity. Ever since the beginnings of radiotherapy certain histological types of tumors have been recognized to be peculiarly sensitive to radiation. With the increasing knowledge derived from analyses of the results in radiated tumors, and by correlation of these facts with the histology of the tumor, a whole new chapter has been added to our knowledge by which we may now recognize those tumors which are responsive to radiation, such as lymphosarcoma or the lymphoepithelioma of Regaud, and give them radiation treatment.

On the other hand, we learn from the study of radiosensitivity that most forms of cancer of the breast—and practically all of the fibrosarcomas and osteogenic sarcomas—are so resistant to radiation that radical surgery is best employed without delay.

One further fact has been contributed to our knowledge of cancer from the study of the experimental tumors of animals, and this relates to biopsy. It is found by experiment that a clean incision into a tumor, or even the excision of a piece of the tissue for frozen section, diagnosis does not increase the rapidity of the spread of the disease, whereas massage or rough handling of a tumor while it is still *in situ* greatly increases the rapidity of its spread to other parts. This fact

is one of very great importance, for it makes possible a safe exploratory operation in any doubtful case in which the disease is so limited to its local point of origin that symptoms diagnostic of cancer are not yet apparent. While the writer would, of course, deplore the unnecessary cutting into cancer tissue where it can be avoided, the fact that methods of exploration have been devised by which this can safely be done in practically every situation, adds enormously to the possibilities of discovery and prompt and appropriate treatment of incipient cases.

Such operations, however, should be performed only when all of the necessary facilities for frozen section diagnosis and for immediate surgical or radiation treatment are available. Delay between the exploratory incision and the operation is fatal to the success of this procedure.

#### TREATMENT OF CANCER

The treatment of cancer today, except in the hands of individuals and institutions which are carrying on experimental methods, is dependent upon surgery or radiation or a combination of these methods. Surgery may include operations performed with the scalpel, or the cautery, or by the newer methods which employ high frequency electric currents for cutting or coagulating purposes. Radiation includes the use of x-ray and of radium. The effectiveness of surgery, and especially that of radiation treatment, has been greatly increased in the past twenty years. It is not improbable that further improvements in technique will yet be made, but as things stand today cancer is cured by surgery or by radiation only when effective treatment is given in the early and local stages of the disease. This statement, however, can be made about many other diseases for which we have specific curative methods. The advanced case of diphtheria or of tetanus dies in spite of antitoxin, and so does the advanced case of diabetes in spite of insulin. With all remedial agents the promptness with which the treatment is begun is a vital matter. In cancer, however, this factor assumes even greater importance because cancer is always a lethal disease unless effective treatment is given in the early and favorable stages of its development.

#### GROUP ORGANIZATION AGAINST CANCER

The resources upon which we must depend in the fight against cancer include all of the general medical resources of the country, including the entire medical profession, the state and federal public health departments, medical societies, general and special hospitals, pathological laboratories, x-ray equipment both for diagnostic and for therapeutic work, and radium and the special apparatus for its efficient application. With the material resources must go also the professional skill and experience to guide their use. Not everywhere in the country can all of the necessary equipment be made available at the present moment, but beginning in the special cancer institutes and cancer hospitals—and now not infrequently

in special tumor clinics or cancer departments of general hospitals—the needed facilities and the necessary professional skill are gradually being made available.

Already it is widely recognized that the diagnosis and treatment of cancer is too big and too intricate a problem for any one man to master. The essential principle of the cancer clinic, as advocated by the American College of Surgeons, is specialization—not of one man but of a whole group of men, whose different abilities are needed in dealing with this difficult disease. The nucleus of this group will always be the surgeon, the pathologist, and the radiotherapist, but representatives of the departments of internal medicine, and of the specialties, such as gynecology, genitourinary surgery, dermatology, the neurological surgeon and the laryngologist, are also needed. Such an organization must function as a group, and conferences for the study of patients for the determination of plans of treatment of individual cases and for the consideration of the end-results must be held at frequent intervals.

With this unduly prolonged recital of the resources in knowledge, in man power, and in equipment which we may draw upon in our campaign against cancer, let us now proceed to develop a battle plan.

#### A BATTLE PLAN AGAINST CANCER

Contact with the enemy must first be made by the advance guard—the public. Not a step in advance can be made in the fight against cancer until the patient consults a physician. The first important activity then must be the education of the public that they may recognize in themselves the symptoms which are suggestive of cancer, namely, any lump, or sore which is slow to heal; any change in digestive or bowel habits, or any abnormal or bloody discharge from the body cavities. Such symptoms do not by any means imply that the patient has cancer, but they are at least worthy of immediate investigation. The American Society for the Control of Cancer has concerned itself especially with this matter of public education. It provides pamphlets and leaflets for distribution to the public, and makes use of radio talks, moving pictures, lectures, articles in the magazines and in the daily press. Already we think we see in districts where these educational measures have been carried on, an increase in the public interest, a diminished dread of the disease, and, what is most important, a larger proportion of early cases seeking medical advice. Much has been done also in the way of public education by state and city health departments, by the Federal Public Health Service, and by the American College of Surgeons, but more remains to be done and that chiefly by *the medical profession*. Every practicing physician is a reliable and valued source of medical education to his own patients and to their families and friends. He has the confidence of his people, and if he tells them to look out for lumps and sores and abnormal discharges, and to waste no time in seeking advice, it counts with

them far more than a thousand leaflets or articles in the daily press. Consider this suggestion, and I venture to say that you can, each of you, think of at least one among your cancer patients where death might have been prevented if you had yourself given him this necessary information before the trouble came.

#### THE IMPORTANT PLACE OF PRACTICING PHYSICIANS

If the public is the advance guard, the practicing physicians of the entire country are the foot soldiers—the men in the trenches—upon whom the brunt of the battle falls; and to them must go the credit for every advance that is made against the enemy. The diagnosis of advanced cancer is unmistakable, but the diagnosis of an early local lesion frequently defies the talents of the most experienced specialist. To that extent to which we are successful in educating the public, to just that same extent do we make more difficult the task of the physician first consulted by the patient with suspicious symptoms. In the cancer clinic these doubtful diagnoses can be settled by an exploratory operation, but unless all of the resources for frozen section diagnosis and immediate treatment are available such an operation may jeopardize the patient's chances of ultimate recovery. It becomes necessary, therefore, to provide for each physician in general practice and for his patients some easily accessible consultation service at a cost within the patient's means. The distances in this country are far too great to handle this problem by concentration centers as is done in Europe. A cancer institute similar to the Memorial Hospital in New York costs in the neighborhood of \$10,000,000 for construction, equipment and maintenance. Until such sums are made available by private endowment or by governmental appropriation, some less expensive method must be devised to fill this want. This is the reason for the movement on the part of the American College of Surgeons to promote cancer clinics and diagnostic centers in general hospitals throughout the country. Already some two hundred hospitals have indicated their desire to meet the minimum standards set up by the College, and it is not unreasonable to suppose that a material increase in consultative cancer service will soon be made available to the physicians practicing in these United States.

To continue our metaphor, cancer institutes, cancer hospitals, and special cancer clinics must be regarded as the heavy artillery which is called upon to aid and support the men in the trenches and to clear the way for them before any material advance can be made against the enemy.

In addition to providing consultative cancer service, however, much yet remains to be done in awakening the interest of physicians in the cancer problem, and in overcoming the pessimism with which they have in the past regarded this disease.

A month ago the Cancer Committee of the Massachusetts Medical Society arranged a two-

day series of clinics in the Boston hospitals, and one hundred and seventy-five cases of five-year cures of cancer were present and were demonstrated, in an effort to overcome this pessimism. There is no question that the physicians who saw those cases went away convinced that there was work which they could do to diminish the mortality from cancer.

There are other ways also in which the practicing physicians of this country can help the situation. Many intelligent patients—in my part of the country at least—seek advice from a physician in regard to cancer only to be put off—sometimes actually without examination—with the explanation that their symptoms are not suggestive of cancer. It is well known that many cases of cancer of the rectum are treated for hemorrhoids, and many cases of irregular uterine bleeding are attributed to the menopause until advancing symptoms necessitate the examination, which reveals advanced cancer. It is generally understood, moreover, that it requires far more knowledge and experience to give safe assurance to a patient that he has *not* got cancer than to detect it when it is present. Any patient presenting symptoms which could possibly be due to cancer deserves the most painstaking examination which the physician consulted is capable of giving.

Another matter in which members of the medical profession can contribute to obtain more accurate information in regard to cancer is in relation to the signing of death certificates. To be of any value it is the point of origin of cancer that is significant, not the site of its metastases. Thus, primary cancer of the liver is a very rare disease, and yet some ten thousand deaths from cancer of the liver are recorded annually in the United States. Many of these may be secondary to cancer of the stomach or intestine, but it is safe to say that actually a very considerable number of these cases were primarily cancer of the breast or of other remote organs and only secondarily involved the liver in the terminal stages of the disease.

#### IN CONCLUSION

Finally, and in conclusion, I would like to indicate to you the possibilities in the way of a reduction of the annual mortality from cancer, even with no material addition to our present resources for the diagnosis and treatment of the disease. In the registration area of the United States, where records are kept of the nature and location of the diseases which cause death, as indicated on the death certificate, an average of 108,000 fatal cases of cancer were recorded annually in the years 1927, 1928, and 1929. This total mortality is further divided into the different regions of the body affected, and in this way we find that cancer of the lip had an average annual mortality during these years of only 554 cases, cancer of the breast accounted for 9946 cases, and cancer of the stomach for 24,602.

We recognize further that cancer in some of its locations is far more favorable for cure, by our

modern methods of treatment, than is that in other regions. We may indeed select the following list of locations, namely, lip, mouth and tongue, stomach, intestine, rectum, ovary, uterus, breast, and skin, as being the more favorable situations, as indeed they are also the more common locations, comprising nearly two-thirds of the total deaths from cancer every year. One cannot say that there are *no cures* even in the remaining one-third of cases which occur in regions or organs which are less favorable for cure, but they have been omitted from consideration in this estimate on the ground that the numbers of cure are few, and that we have not at the moment any very accurate statistics on which to base our calculations.

At the clinic for "cured" cases of cancer, which we held in Boston in April, we were able to obtain from the Palmer Memorial, the Collis P. Huntington Memorial, and the Massachusetts General Hospital, the actual percentages of all primary cases of cancer of these ten regions which were found to be alive and free from disease for at least five years after treatment. We also succeeded in obtaining the actual percentages of five-year "cures" for each of these regions in the early and favorable cases which were recognized and given effective treatment, whether by surgery, or by x-ray or radium, or by a combination of these methods.

As an example, I will cite the figures for cancer of the breast, which are based on the series of cases which entered the wards of the Massachusetts General Hospital in the calendar years 1921, 1922, and 1923. One hundred and seventy-seven cases of cancer of the breast entered the hospital during these three years, and five or more years later fifty-six of these patients were alive and well, or 32 per cent. Of these 177 cases some were frankly inoperable, others were suitable only for palliative operations without expectation of cure. The remaining 111 cases were suitable for an attempt at radical cure by operation, and fifty of these cases were in the early local and favorable stage of the disease. Of these fifty patients, thirty-one were alive and well at the end of the five-year period, or 62 per cent. Similar figures were obtained for the other nine "favorable" locations, some being, of course, less encouraging and others more so.

With the mortality figures of the Census Bureau as a starting point, using the percentage of cures in all primary cases in these ten regions, it was possible to calculate the annual number of patients alive and dead for these ten regions, thus constructing a morbidity estimate which we have not had before. Thus, if there were 554 deaths from cancer of the lip, and the primary cures amount to 60 per cent, 554 is 40 per cent of the total number of cases, *i. e.*, 1385. If to this morbidity figure we then apply the percentage of cures obtained in early and local cases of lip cancer, namely, 88 per cent, we get an annual mortality figure of only 167 cases, and our cures increase

from 831 cases annually to 1218, a saving of 387 lives in every year.

It is probably true that the percentage of figures obtained at these three Boston hospitals are not as high as those of a number of other special cancer institutes and cancer clinics, but it is our belief that they may be taken as a reasonable average for the larger clinics throughout the country. If, on the contrary, the criticism is offered that these percentages are too high, I can only say that every hospital in the country which has modern equipment in the way of surgery, x-ray, and radium, and a coöperative pathological laboratory can readily equal these figures if indeed they do not surpass them. It is only a question of the amount of energy and interest devoted to this particular field of medicine.

Applying this method of computation to the whole group of ten locations which we have classed as "favorable," we obtain an estimate of 92,618 cases of cancer annually, a mortality of 69,508, and only 23,100 "cures," or 25 per cent.

If, however, all of these 92,618 cases in the favorable group could be discovered and treated while in the early and local stages of the disease, the mortality would be brought down from 69,508 to 39,958, the "cures" would rise from 23,100 to 52,660, a saving of 29,550 lives a year, and a reduction of the total mortality from cancer of 27 per cent.

No miraculous discovery of the long-sought cause of cancer is necessary to obtain these results, nor any specific remedial agent. Only three things need to be done to accomplish this result. The public must be taught to recognize symptoms which are in any way suggestive of cancer, and to avoid the least delay in consulting a competent physician. The medical profession must be aroused to the vital importance of immediate and thorough examination of the patient. When the physician is himself in doubt as to the diagnosis, expert consultative service in the cancer or tumor clinic of some readily accessible general hospital must be made available to him and to his patients, without unreasonable expense.

The Cancer Commission of the California State Medical Association has already made a formidable attack upon this question in arousing the interest of the physicians of California. In due time they will proceed to sponsor the education of the public, and in the meantime special cancer hospitals and cancer clinics in general hospitals are being established all over the State of California and in other states as well.

It appears to me that it rests very largely with us, as members of the medical profession, whether we shall take on this fight to reduce the cancer death rate. I confidently hope that the members of the California State Medical Association will be among the first volunteers to enlist, and that it will be for the duration of the war.

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